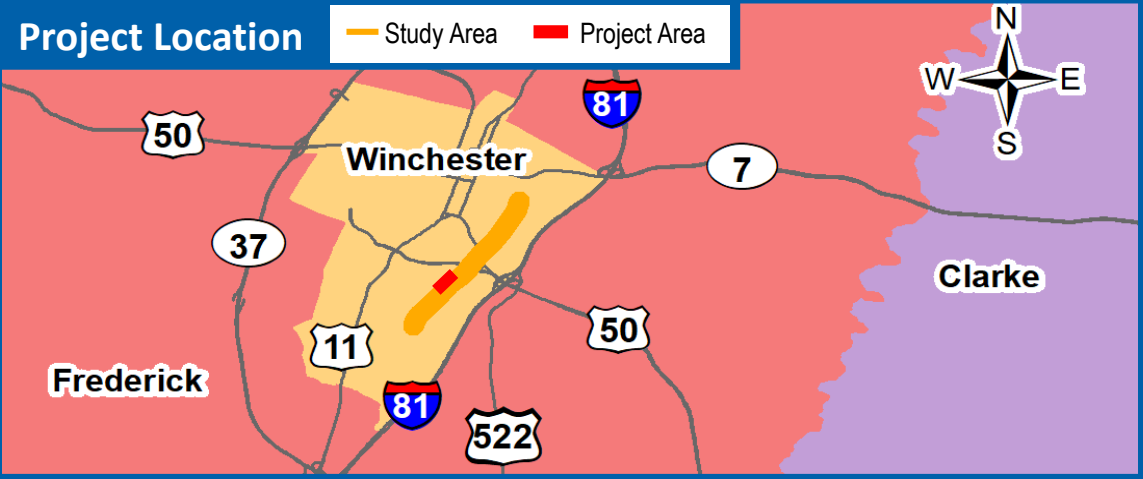


Improvement #8: Martin's/BB&T Commercial Entrance and Pleasant Valley Road

Convert Westbound Commercial Exit to Right-Out



Operations and Safety Improvements

The following recommendations are projected to improve operations and/or safety along Pleasant Valley Road.

Martins/BB&T Commercial Entrance and Pleasant Valley Road

- Improvement 8:** Convert Westbound Commercial Exit to Right-Out
 - ✓ Five-year EPDO crashes reduced by 20
 - ✓ Eight intersection conflict points removed
 - ✓ Minimal impact to traffic operations

Traffic Operations Results

Improvement 8: Apple Blossom Cor

Improvement 8: Martins/BB&T Entr

Approach LOS

A	B	C	D	E	F
No-Build	No-Build	No-Build	No-Build	No-Build	Build

*Note: Westbound Apple Blossom Corner Drive delay changes from 54.9 seconds to 55.0 seconds.

Project Schedule & Preliminary Cost

Project schedules and cost estimate were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.

Schedule:

0 5 10 15 20 25 30 Months

Preliminary Engineering Right of Way/Utilities Construction

Cost:

Phase	Cost Estimate (2020 Dollars)
Preliminary Engineering	\$130,000
ROW and Utility Relocation	\$80,000
Construction	\$160,000
Total Cost	\$370,000

Safety Results

Crash modification factors (CMFs) were chosen to project the reduction in all severity crashes weighted to equivalent property damage only (EPDO) crashes.

2014-2019* EPDO	CMF	EPDO Reduction
56	Remove minor approach left turns (0.65)	20

* 2019 VDOT crash data was available through July 30, 2019

Conflict points count the relative risk associated with vehicle interactions. Conflict point reduction is a metric used by VDOT to quantify safety improvements. Crossing conflict points are weighted twice as much as diverging and merging conflict points.

Conflict Point	Existing	Future
● Diverging (x1):	3	2
● Merging (x1):	3	2
○ Crossing (x2):	5	2
Count Total:	11	6
Weight Total:	16	8
Weighted Conflict Point Reduction:		8

Existing Conflict Points:

Future Conflict Points: